AMENDMENTS TO THE CLAIMS

1. (Currently amended) An RF data transfer system comprising:

means for detecting repetitive RF interference which occurs during RF data transfer intervals; ~~and~~

means, operative in response to periodicity and duration data obtained by said detecting means, for scheduling said RF data transfer during said intervals that avoid said interference[[.]]; and

means for determining the most efficient of:

scheduling said RF data transfer during said intervals that avoid said interference; and

transmitting said RF data during said data transfer intervals and allowing forward error correction of a receiver to correct errors in said RF data transfer.

2. (Canceled)

3. (Original) The system of claim 1 wherein said interference is a radar signal.

4. (Original) The system of claim 1 wherein said scheduling means includes means for shifting a time sequence of said RF data transfer to avoid said interference.

5. (Original) The system of claim 4 wherein a modulation of said RF data transfer is changed to accommodate said time sequence shifting.

6. (Original) The system of claim 4 wherein a code rate of said RF data transfer is adjusted to accommodate said time sequence shifting.

7. (Original) The system of claim 1 wherein said scheduling means includes means for skipping at least one time slot in a sequence of time slots of said data transfer to avoid said interference.

8. (Previously Presented) The system of claim 7 wherein a modulation of said RF data transfer is changed to accommodate said skipping at least one time slot.

9. (Previously Presented) The system of claim 7 wherein a code rate of said RF data transfer is adjusted to accommodate said skipping at least one time slot.

10. (Original) The system of claim 1 wherein said means for detecting is an antenna separate from antennas used to effect said RF data transfer.

11. (Original) The system of claim 10 wherein said antennas used to effect said RF data transfer are sectorized and are used to determine a direction of said interference.

12. (Previously Presented) A method of reducing repetitive RF interference with RF transmissions, said method comprising the steps of:

detecting interference using a filter;

sweeping said filter across an RF band of interest;

calculating characteristics of RF interference within said RF band of interest to arrive at an interference profile of periodicity and discrete durations of said interference, and

adjusting time sequences of desired RF transmissions to accommodate said interference profile.

13. (Previously Presented) The method of claim 12 wherein said filter is a narrow band filter.

14. (Original) The method of claim 12 wherein said desired RF transmissions occur in sequential repetitive time slots and wherein said adjusting step includes the step of eliminating at least one of said time slots for the duration of said interference.

15. (Original) The method of claim 14 wherein said desired RF transmissions are rescheduled for the duration of said interference.

16. (Original) The method of claim 15 wherein a modulation of said RF transmissions is changed to accommodate data in remaining ones of said time slots.

17. (Original) The method of claim 15 wherein a code rate of said RF data transfer is adjusted to accommodate remaining ones of said time slots.

18. (Original) The method of claim 12 wherein said RF interference is repetitive RF interference.

19. (Original) The method of claim 18 wherein said repetitive RF interference is a radar signal.

20. (Currently Amended) A method for detecting and mitigating interference with RF data transmissions in certain RF bands, said method comprising the steps of:

determining time periods of repetitive RF interference within an RF band of interest, using at least one antenna in electrical communication with at least one RF filter, to arrive at an interference profile of periodicity and duration of said interference, wherein ~~said RF filter is separate from a receiver and a transmitter, and~~ said at least one antenna is separate from antennas[[,]] used to carry out said RF data transmissions; and

determining the most efficient of:

adjusting a time sequence of desired RF data transmissions to accommodate said interference profile, rescheduling transmissions to avoid said interference; and

transmitting said RF data and resending said data sent during said interference.

21. (Original) The method of claim 20 wherein a modulation of said RF data transfer is changed to accommodate adjustment of said time sequence.

22. (Original) The method of claim 20 wherein a code rate of said RF data transfer is adjusted to accommodate adjustment of said time sequence.

23. (Original) The method of claim 20 wherein said certain RF bands are unlicensed bands.

24. (Original) The method of claim 20 wherein said interference is a radar signal.

25. (Original) The method of claim 20 wherein said desired RF data transmissions occur in sequential repetitive time slots and wherein said adjusting step includes the step of eliminating at least one of said time slots for the duration of said interference.

26. (Previously Presented) The method of claim 25 wherein a modulation of said RF data transfer is changed to accommodate data in remaining ones of said time slots.

27. (Original) The method of claim 26 wherein a code rate of said RF data transfer is adjusted to accommodate remaining ones of said time slots.

28. (Original) The method of claim 20 wherein said at least one RF filter further comprises an RF detector.

29. (Original) The method of claim 20 wherein antennas used to effect said RF data transmissions are sectorized and are used to determine a direction of said interference.

30. (Canceled)

31. (Currently amended) The system of claim 1 [[30]] wherein efficiency is based on one or more of payload, customer payload, and data payload.

32. (Currently amended) The method of claim 12 further comprising:

determining the most efficient of:

said adjusting time sequences of desired RF transmissions to accommodate said interference profile; ~~and~~

allowing forward error correction of a receiver to correct errors in said RF data transfer; and

resending said data sent during said interference.

33. (Previously Presented) The system of claim 32 wherein efficiency is based on one or more of payload, customer payload, and data payload.

34. (Canceled).

35. (Currently amended) The system of claim 20 [[34]] wherein efficiency is based on one or more of payload, customer payload, and data payload.

36. (New) The system of claim 1 wherein said means for determining further determines whether transmitting said RF data during said data transfer intervals and resending data sent during said RF interference is more efficient than said scheduling said RF data transfer during said intervals that avoid said interference and said transmitting said RF data during said data transfer intervals and allowing forward error correction of a receiver to correct errors in said RF data transfer.

37. (New) The method of claim 20 wherein said determining the most efficient further comprises determining whether transmitting said data and allowing forward error correction of a receiver to correct errors in said RF data transfer is more efficient than said adjusting a time sequence of desired RF data transmissions to accommodate said interference profile, rescheduling transmissions to avoid said interference, and said transmitting said data and allowing forward error correction of a receiver to correct errors in said RF data transfer.